

Exploring how Triguna personality influence Alcohol use: By examining drinking motives as mediator

Lakshmi Angral¹, Mukti Gupta²

¹Student, Department of Psychology, Chandigarh University, Mohali, Punjab, India. ORCID: <https://orcid.org/0009-0005-7308-2697>. Email: lakshmiangral@gmail.com

²Assistant Professor, Department of Psychology, Chandigarh University, Mohali, Punjab, India. ORCID: <https://orcid.org/0000-0001-9082-0691>. Email: Mukti.e17616@cumail.in

Author Note: Lakshmi Angral and Mukti Gupta are affiliated with the Department of Psychology, Chandigarh University, Mohali, Punjab, India.

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ABSTRACT

The objective of this study is to study Triguna personality traits influence on alcohol use, by examining mediating role of drinking motive. Personality-based differences in behavioral susceptibility can be meaningfully understood via the Triguna framework, which conceptualizes Sattva, Rajas, and Tamas as dynamic forces influencing cognition, emotions, and motivations. Alcohol use among young adults is mainly motivated by fundamental cognitive motivations rather than situational elements. Alcohol susceptibility conceptualized as alcohol sensitivity or subjective response refers to individual differences in sensitivity to the pharmacological effects of alcohol, which impact drinking behavior and risk for alcohol related issues (Morean & Corbin, 2010). One such model which explains the motives for drinking is "The motivational model of alcohol use" (Cox & Klinger, 1988; Cooper, 1994) which indicates that individuals utilize alcohol to regulate emotional states and achieve desired outcomes. The present study examined the influence of Triguna personality traits: sattva, rajas, and tamas, on drinking motives among young adults aged 18-25 years. A sample of N=200 participants, including drinkers and non-drinkers, was assessed using Vedic questionnaire inventory and Drinking motives questionnaire. The reliability analysis indicated a satisfactory internal consistency of Triguna subscales. Next, descriptive and correlation analyses revealed that sattva was negatively associated, while Rajas and Tamas showed the strongest relationships. Following this, logistic regression results show Tamas strongly predicts alcohol use status. Lastly, mediation analysis explains that drinking motives notably act as mediators for the relationship between Tamas and alcohol use. Therefore, the findings highlight the influence of personality-based motivational channels on alcohol use.

Keywords: Triguna framework, Drinking motives, Motivational model, Drinkers and non-drinkers.

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Introduction

The period of young adulthood is a complex stage where curiosity and exploration develop which drives individual choices like believing in taking short-cuts such as substance use, which can lead to dependence overtime. Substance abuse such as drugs, alcohol use, medication exploitation, which can cause prolonged

harmful effects to both mental as well as physical complications overtime, which is a growing concern among young adults mainly driven by psychological motives such as to regulate their emotions and pressure to fit in. Various studies emphasize the role of personality in shaping drinking motives of individuals to understand why people drink but most of this work is based on western frameworks, such as big five

RESEARCH PAPER

personality factor theory, creating a limitation in understanding the personality influence on behavior in non-western contexts like India. There are various concepts to understand personality from Western models which lack cultural factors which can only be understood through the Indian perspective of personality. One such framework is 'The Triguna theory' that explains personality in terms of three important attributes; Sattva, Rajas, and Tamas. Triguna theory describes these traits as dynamic and not fixed traits which influence individual behavior, thinking patterns, and feelings. Despite its relevance, very few studies have examined the influence of Triguna traits on drinking motives. Therefore, the gap becomes very important because limited research has examined how Triguna traits influence drinking motives in cultural frameworks which will shape behavior differently compared to western models, thus indicating a need for further investigation.

Personality has always been a central concern in psychology. While current psychology has largely relied on western frameworks of personality, such as the Five-Factor Model and Eysenck's theory, indigenous psychological traditions have also provided important insights into human behavior and personality. One such significant concept is Triguna theory; an ancient Indian psychological concept originating from 'Samkhya' philosophy and traditional texts such as the 'Bhagavat Gita'. The Triguna theory states that every human personality is ruled via three fundamental psychological qualities or 'gunas': Sattva, Rajas, and Tamas, which are dynamic forces that influence individual thoughts, emotions, motivation, and behaviors. Modern research has come to recognize the Triguna framework as an important original personality model that provides a culturally based understanding of psychological functioning (Rastogi & Parihar, 2023; Chandra et al., 2024).

The word 'guna' in Sanskrit refers to a quality, attribute, or fundamental tendency that shapes the behavior of an individual. (Ilavarasu, Mohan, & Hankey, 2013). According to traditional Indian philosophy, the creation and human awareness are composed of these three gunas, which interact continuously to determine behavioral patterns and psychological tendencies (Kumar, 2013). Unlike western personality categories, the Indian concept of Triguna coexists in different proportions within every individual, and their dominance may vary in different situations and developmental stages across life (Rastogi et al., 2023). This dynamic relationship between the gunas lays the foundation of the Triguna personality framework, which illustrates individual differences in cognition, emotion, and behavior

(Rastogi & Parihar, 2023). Each guna represents a unique way of thinking that impacts how individuals see the world and engage to their life experiences.

Sattva guna is associated with clarity, balance, self-regulation, and wisdom. Individuals with elevated levels of sattvic traits tend to show emotional stability, good decision-making skills, and are more engaged in peaceful behaviors and strive for harmony in their lives. Sattvic dominating individuals are motivated through integrity and compassion (Anuradha & Kumar, 2015). A study explaining the relationship between Triguna traits and life satisfaction which signifies sattva is positively linked with life satisfaction and psychological well-being, while it has shown a negative association with perceived stress. (Sharma et al. 2021).

In comparison, Rajas represents activity, passion, ambition, and restlessness. Individuals with Rajasic trait dominance are characterized by high energy intensity, competitive drive, and a stronger desire for attainment. Research examining Rajasic traits suggests they can promote efficiency and goal-oriented behavior; excessive Rajasic traits, may lead to impulsivity, emotional instability, and increased stress, which can influence decision-making and lifestyle choices (Goyal & Rathore, 2022). Studies examining Triguna traits in relation to psychological constructs suggest that Rajasic-mediated behaviors often involve heightened behavioral activation and emotional reactivity (Sharma et al., 2021). Rajasic dominating traits is considered a driving force that motivates physical and cognitive activity, impacting behaviors such as goal striving, perceptual engagement, and emotional responses. However, dominant rajasic tendencies may lead to agitation, closeness to outcomes, and cognitive discomfort. Rajasic dispositions are influenced by lifestyle factors such as overwork, excessive stimulation, and consumption of stimulating foods and beverages including coffee, tea, chocolate, and spicy foods which lead to increased mental restlessness and activity (Gaur, 2024).

The third guna, Tamas, is associated with inertia, lethargy, ignorance, and resistance to change. Tamasic tendencies are characterized by passivity, confusion, and lack of awareness. Tamasic dominated individuals may experience reduced levels of motivation, lower psychological clarity, and greater susceptibility to maladaptive behaviors, and prolonged tamasic traits will lead to poor self-regulation and may have trouble adapting environmental challenges. Research examining Triguna traits and psychological well-being has found that Tamasic tendencies are negatively correlated with psychological well-being and personal

RESEARCH PAPER

growth (Matani et al., 2016). Overall, harmony among the three gunas is essential for optimal mental functioning. (Rastogi & Parihar, 2023; Girdhar et al., 2022; Annu & Kumar, 2024). Personality plays a crucial role in impacting behavior, decision-making, and emotional regulation. Within the Triguna concept, patterns of behavior originate from the relative dominance of Sattva, Rajas, and Tamas levels (Sharma et al., 2021).

Higher Sattvic dominance personalities tend to demonstrate behaviors characterized by self-control, ethical decision-making, and emotional balance. On the other hand, individuals who possess strong Rajasic traits show behaviors driven by ambition, action, and change. Whereas individual those who represent stronger Tamasic dominance show behaviors driven by lethargy, impulsivity, and reduced self-regulation. Similar study explaining the relationship between Triguna traits and life satisfaction and perceived stress states that Sattva is positively correlated with life satisfaction and negatively with perceived stress and in contrast Rajas and Tamas both is negatively associated with life satisfaction but positively with perceived stress (Sharma et al., 2022). Another study which highlights the influence of Triguna traits on binge eating and mindful eating which concluded that Tamasic traits is positively correlated with binge eating behaviors and Sattvic traits are positively correlated with mindful eating and negatively with binge eating behaviors practices (Lokhande & Panwar, 2025). Therefore, Triguna personality traits influence lifestyle choices such as coping strategies which can differs in every individual based on which guna is dominant in them, by shaping how an individual responds to the situation and interprets the consequences of their actions. As discussed, Tamasic traits are more likely to engage in maladaptive behaviors like binge eating, stressful life choices and unhealthy coping decisions such as indulging in substance use behaviors. The relation between personality attributes and substance use has been studied in psychology in many aspects. Behavioral patterns like substance abuse, their exposure to addiction, and their consumption patterns, are often influenced by personality traits. A recent study explored the relationship between Triguna personality traits and alcohol-related behavior. Another study comparing men with and without alcohol dependence scored significantly higher on Sattvic traits, while those with alcohol dependence demonstrated higher levels of tamasic traits and negative affect (Nedungottil et al., 2023). These findings suggest that Tamasic tendencies may be linked with rising susceptibility to maladaptive behaviors such as alcohol

dependence, while Sattvic traits may serve as protective factors. The relationship between personality and susceptibility to certain habits can be studied by understanding the concept of personality from both the Indian and western perspective.

Personality is not defined in a direct sense, instead the concept of Swabhava referred to in scriptures covers all aspects of it. It not only molds behavior but also influences emotional experiences and well-being (Srivastava, 2012). In the Indian psychological framework, the dominance of different gunas determines an individual's emotional tendencies. For instance, higher Sattvic traits tend to experience greater gratitude and happiness, whereas dominance of Rajasic and Tamasic traits is associated with lower emotional well-being (Parolkar, 2022). It is defined as a holistic system involving the body, mind, and consciousness. It is not fixed but constantly evolving, influenced by the interaction of the three gunas-Sattva, Rajas, and tamas- which shape individuals' thoughts, emotions, and behavior. From a western perspective, personality is broadly identified as one of the most impactful psychological constructs to understand why individuals behave distinctly even when they encounter environments related situations. Personality can be conceptualized as enduring individual differences in patterns of cognition, affect, and behavior that demonstrate relative stability across time and situational contexts (Roberts & Yoon, 2022). Personality can influence one to engage in risk-taking behaviors. Risk-taking behavior refers to conduct that involves potential hurt or negative outcomes but is continued to follow that they deliver some form of psychological benefit or emotional contentment. Studies have consistently shown personality traits influence individuals' propensity to engage in risky activities. Traits like impulsivity, sensation seeking, and emotional instability have been associated with higher levels of risk-taking behaviors, like alcohol use, smoking, and use of addictive substances and individual who possess these traits may be more likely to seek excitement, stimulation, or temporary relief from stress, even when outcomes carry negative impact. Personality does not directly link to drinking motives but increases the likelihood of developing certain motives (Freichel et al., 2023). Alcohol consumption can provide both sensitive ease and pleasant perception. Individuals with certain traits may be more susceptible to excessive alcohol use (García et al., 2025).

Another factor that connects personality and harmful behaviors is decision-making style. Decision-making includes analyzing potential consequences and choosing actions based on perceived risks and positive

RESEARCH PAPER

outcomes. As personality traits influence how an individual will respond to a situation, an individual with higher impulsivity would make a rapid decision without considering long term consequences and on the other hand individual with higher conscientiousness and self-control may carefully analyze risks before jumping to the conclusion. Research examining alcohol misuse has proposed that impulsive decision-making types are linked with rising levels of concerning drinking, highlighting the role of personality in shaping behaviors (García et al., 2025). In addition to influencing the beginning of alcohol use. Research examining different substance use disorders has stated that personality attributes can mold patterns of substance use and impact the intensity of addiction Freichel et al. (2023). Individuals with impulsive and risk-taking traits experience stronger cravings, can have trouble controlling substance use urges, and are more likely to relapse after the treatment. This study helps to understand how personality influences individuals to engage in alcohol use, but also how some individuals are more vulnerable to long term alcohol use (Singh et al., 2022). Behavior is influenced by the desire to achieve something which can be subjective in nature, and these motives can be internal motivations, external rewards, and mental expectations to cope with the situation (Bandhu et al., 2024). Similarly, drinking behavior is motivated by various subjective beliefs that are reinforced by the outcomes of the behavior the individual expects.

One way to understand the connection between personality and alcohol use is through the concept of drinking motives, which refers to the reasons why individuals consume alcohol.

These motives are shaped by emotional needs and societal factors that guide drinking behavior. Research has recognized several common types of drinking motives, such as coping motives, enhancement motives, social motives, and conformity motives. Each one of these motives has different kinds of psychological needs, which are fulfilled differently through alcohol consumption (Cooper, 1994). Although personality traits impact emotional perception and behavioral inclination, they also guide the motives that lead individuals to drink (Hyderali et al., 2023). Individuals who frequently experience stress, anxiety, or adverse emotions may consume alcohol to cope with these feelings; some individuals drink alcohol for enjoyment and pleasurable experiences. Social influences may also lead to drinking behavior when individuals consume alcohol to fit in with peers or tend to fit in with in the social situation. These different motives exhibit how personality traits can influence individuals drinking

alcohol but the cognitive reasons behind their drinking conduct (Hyderali et al., 2023). In late adolescence and emerging adulthood, alcohol use is driven by psychological motives rather than chance, which is defined using the motivation model proposed by (Cox & Klinger, 1988; Cooper, 1994) posits that individuals drink to achieve specific emotional or social consequences, which is impacted by drinking motives. Moreover, The motive to drink can strengthen favorable feelings (excitement, enjoyment) or to blunt unfavorable feelings (stress, sadness). Therefore, choice to drink is an interplay of emotional and cognitive processes, whereby the decision is based on the emotional change that the person expects to achieve by drinking e.g. tension lowering or mood improvement, or the indirect effects, such as peer acceptance. (Cox & Klinger, 1988; Cooper, 1994)

Bi-directional dimensions of motives:

Reinforcement Valence- It denotes whether a person drinks to achieve something positive such as pleasure or excitement or to mitigate something negative such as stress or sadness. This difference is crucial because studies show that negative reinforcement is highly associated with concerning alcohol use in contrast to positive reinforcement (Kuntsche et al., 2005). Source of Internal motives arise from subjective emotional states, while external motives are shaped by social factors such as peer influence and societal norms. By combining these two dimensions, four main drinking motives are recognized

Enhancement motives are associated with drinking to raise positive emotional states. These motives are substantially linked with novelty-seeking, lack of self-control, and reward sensitivity. Individuals elevated in enhancement motives are likely to participate in binge drinking and heightened alcohol use across cultures. For e.g. "Because you prefer the feeling", To feel better or due to arousal. This category of drinking is frequently socially reinforced, especially in environments where alcohol use is standardized (Kuntsche et al. (2005),

Social motives are associated with drinking to improve interpersonal relationships and societal exposure. These motives can be observed among college students, where alcohol is combined into social actions. For e.g. "Because it makes social events more fun". A study suggests that social motives are linked with moderate and controlled drinking, making them less dangerous for measured against coping motives (Kuntsche et al., 2005). Coping motives signifies the use of alcohol as a plan for managing negative emotions. This type of drinking is nearly associated

RESEARCH PAPER

with cognitive distress, depression, and anxiety. It is the strongest predictors of alcohol-related problems. For e.g. "To overlook your worries or mitigate anxiety". This motive shows an internal, negative reinforcement of drinking motives.

Conformity motives are linked with drinking to evade social decline or negative analysis. These motives demonstrate external pressure (negative reinforcement of drinking motives), over internal desire. Although conformity motives are generally linked to reducing levels of alcohol use, they signify susceptibility to peer impact and may contribute to problematic situations.

"For e.g. To fit in with a group you like" or avoid exclusion. (Cooper,1994).

However, various studies among college students provide significant evidence for the four types of drinking reasons in anticipating alcohol use and its related harms (Kuntsche et al., 2005). These motives drive the individual to predict those with elevated drinking motives would be less likely to adapt behaviors that reduce potential harm and vice versa, given that the fundamental aim to consume alcohol is primarily inconsistent. These anticipated consequences may involve the enhancement of positive emotions such as arousal and satisfaction, or the minimizing of negative emotions such as stress, anxiety, and sadness. However, the decision to drink demonstrates an interplay between affective (emotional) and cognitive (analytical) processes. Therefore, drinking behaviors can be determined based on expected emotional regulation consequences, making motives the most immediate determinants of alcohol use (Cooper, 1994). To better understand alcohol consumption behavior, the present study draws upon the Triguna theory from Indian psychology, which provides a framework for explaining individual differences in personality and behavioral tendencies. The Triguna framework is a cultural rooted concept which can be understood through three fundamental qualities- Sattva, Rajas, and Tamas. These gunas are present in all individuals in different proportions and dynamically interact to shape cognition, emotions, and behavior. Unlike static trait models, Triguna emphasizes that personality is fluid and context-dependent, with the predominance of each guna dynamic across situations and time (Rastogi & Parihar, 2023). Research suggests that these gunas works as trait-like dimensions, where their dominance influences stable patterns of cognition, emotion, and behavior (Anuradha & Kumar, 2015). Thus, variations in the combination of Sattva, Rajas, and Tamas result in distinct personality profiles across individuals. Triguna theory can explain why people become more

susceptible to consume alcohol and their respective motives. Based on this conceptual framework, the dominance of these fundamental gunas may also molds individual subjective Thus, the Triguna framework provides a culturally rooted explanation for individual differences in drinking motives, where Rajas and Tamas predispose individuals toward more dangerous and coping- driven alcohol use, while sattva acts as a protective factor promoting self-regulation and behaviors which reduce harm (Nedungottil et al., 2023). While Triguna framework explains personality-based tendencies toward drinking motives, cognitive theories further explain the mechanisms through which these predispositions translate into actual drinking behavior. One such theoretical construct is cognitive mechanism; **expectancy theory** which is proposed by Alan Marlatt and further developed by Mark Goldman, which explains how an individual develops beliefs about alcohol's effects through learning and experience. These beliefs mold motives for drinking and behavior, such as "alcohol makes me more social" or "drinking helps me relax" (Goldman et al., 1987). Furthermore, expectancies considerably forecast drinking motives, verifying that motives facilitate the relationship linking cognition and behavior, Engels et al. (2005). Based on these cognitive mechanisms, empirical research has further examined how specific alcohol-related expectancies transformed into distinct drinking motives, particularly within culturally relevant contexts such as India. For instance, positive expectancies such as the belief that alcohol enhances social experiences and increases the likelihoods of social drinking motives, whereas believing that alcohol reduces stress fosters coping motives. Open organized reviews concentrating on India shows that drinking motives involve both social enjoyment and stress relief, aiding both positive and negative motives. Indian adolescents record wide variation in drinking motives depending on culture, familial, and academic pressures Nadkarni et al. (2022).

Despite extensive research on drinking motives for alcohol consumption, particularly enhancement, social, conformity and coping motives, there remains a significant gap in understanding how culture-specific personality constructs such as Triguna (comprising Tamas, Rajas and Sattva), influence these motivational pathways. Most existing studies consist of models of alcohol use which are developed by taking western frameworks into account, focusing majorly on individual traits such as impulsivity, extraversion, and neuroticism. These western models are accepted globally but fail to incorporate culturally relevant personality frameworks. As a result, traditional and

RESEARCH PAPER

non-western personality theories are often overlooked. In Indian context, there are some studies which have explained drinking motive, but rarely examined how these drinking motives are affected by culturally specific personality frameworks. Overall, there are some existing literatures in both western as well as in Indian context which explains Triguna personality and drinking motives separately. Therefore, there is limited evidence for their direct connection. This gap is important particularly for university-going students as they are still in their developing stage where they are influenced by both social interaction and digital transitions. The relationship between Triguna theory and drinking motives is still underexplored in collectivist setting like India. Therefore, the present study aims to explore the relationship between Triguna theory and drinking motives among young adults aged 18–25-year-old and to explore how the variation in Sattva, Rajas, and Tamas influence the drinking motives for alcohol use in culturally grounded settings.

Method

Inclusion and Exclusion Criteria

Participants were selected based on inclusion and exclusion criteria to ensure the methodological rigor and developmental relevance to the targeted age group. To be included in the inclusion criteria participants must be between 18-25 years of age representing emerging of adulthood, and able to participate and respond to self-report questionnaires in English. The informed consent was taken, and all participants voluntarily participated in the study. Participants were excluded if they didn't come under the selected age range, providing inconsistent responses or incomplete responses. Participants were allowed to withdraw from the study anytime. Moreover, individuals with any kind of cognitive and psychological impairments which could affect the results of accuracy are excluded from participating. These criteria ensure that the sample is accurate and appropriate for assessing psychological constructs like personality traits and drinking motives using standardized measures.

Participants characteristics:

The sample consisted of N=200 Indian university young adults, aged 18 to 25 years including both drinkers and non-drinkers. Out of total 55.5% (n= 111), non-drinkers and 44.5% (n= 89) drinkers, allowing for comparative study across both groups. Participants were mostly young adults, typically within the developmental stage of emerging adulthood, which is often linked to increased experimentation and risk-taking behaviors, including substance use behaviors. The study also examined personality-based differences between individuals

classified as drinkers and non-drinkers using Triguna traits, which examined the potential differences across the three personality traits, to better understand meaningful psychological differences between the two groups.

Sampling procedure

The study used a non-probability sampling approach, combining both convenience and snowball sampling methods. Participants were recruited through universities, peer networks, and community settings, which helped further by allowing easy access to targeted groups (convenient sampling). With the help of the existing participants, finding more people became easier by sharing the survey link with other eligible individuals within their social networks, to expand the sample size further. This approach facilitated the expansion of a diverse group of young adults within the specified age range to make the sample more appropriate and diverse. Although non-probability sampling may limit how far the results can be generalized, non-probability sampling is commonly used in psychological research where the primary expectancy is to examine relationships between variables rather than estimating the population level trends. The participants were required to be registered in a university program in India and lie within the age range of 18-25 years. The participants voluntarily participated, and it was ensured that informed consent is taken before the data collection process. After carefully screening the responses, inconsistent responses were removed and a total sample of 200 university students were obtained.

Data Collection Procedure

All the participants were provided with a self-report questionnaires and data was gathered by a structured survey method, using both offline mode (paper-and-pencil) and online questionnaire format to increase accessibility and participation across university settings. For offline data collection, participants were approached in classrooms and common academic engaging spaces after getting the necessary permissions. The researcher, along with trained postgraduate psychology assistants, administered the questionnaires usually in small groups. Clear instructions were provided to the participants, and most participants completed the survey in approximately 10-20 minutes. After completing data collection, the completed responses were carefully entered into a secure digital format. For the online data collection process, the survey link was shared through student personal groups and peer networks. The first page included an informed consent form, and participants could only proceed after providing consent. To maintain consistency, same measures were

RESEARCH PAPER

used across both modes of administration. Apart from the mode of administration, no major differences were introduced during the data collection process.

Measures

The Vedic Personality Inventory (VPI) was used to assess Triguna personality dimensions, which is developed by Wolf (1999). Triguna framework rooted in classical Indian philosophical traditions, particularly Samkhya philosophy. The VPI helps to understand personality as a dynamic interplay of three fundamental qualities: Sattva, Rajas, and Tamas, which together influence cognition, emotion, and behavior of an individual (Wolf, 1999). The VPI consists of 56 self-report items, each rated on a 7-point Likert-type scale ranging from 1: denoting very strongly disagree to 7: denoting very strongly agree; reflecting the extent to which the statement applies to the individual. The items are distributed across three subscales representing the Triguna dimensions:

Sattva (15 items) reflects psychological balance, clarity, self-control, contentment, and adaptive functioning. Rajas (19 items) reflects activity, ambition, restlessness, emotional reactivity, and desire-driven behavior. Tamas (22 items) reflects inertia, confusion, lethargy, avoidance, and maladaptive functioning. Scores are computed separately for each guna and interpreted proportionally, reflecting the relative dominance of sattva, rajas, and tamas within an individual's personality (Wolf, 1999). Previous research has demonstrated high internal consistency with Cronbach's alpha coefficients reported to be above (0.90) and construct validity of the VPI corresponds meaningfully with psychological functioning, including well-being, emotional regulation, and maladaptive behaviors (Wolf, 1999; Nedungottil et al., 2022). This supports its use as a reliable measure of personality (Wolf, 1999). Subscale scores are computed by averaging item scores for each guna; Higher scores indicate a greater predominance of that guna.

Drinking Motive Questionnaire (DMQ)

The drinking motives questionnaire developed by Mary Lynne Cooper (1994) has consistently demonstrated good to high internal consistency with Cronbach's alpha coefficients typically ranging from .70 to .90 across its four subscales. It consists of 15 self-report items measuring three core motivational dimensions; Enhancement: drinking to improve positive mood, Coping: drinking to manage unwanted emotions, and social motives; drinking to obtain social benefits or enhance social interaction, representing the most observed psychological reasons for alcohol consumption among young adults. The (DMQ)

Drinking motive questionnaire used the most widely used version which uses a 4-point Likert scale for scoring ranging from 1: almost never/never, 2: sometimes, 3: almost always/ always, 4: often. It has been consistently supported across diverse samples. These motives have been shown to differently predict alcohol consumption patterns, with coping and enhancement motives associated with higher risk-drinking, thereby supporting the validity of the measure (Kuntsche et al., 2005). The scale does not include a neutral midpoint, thereby encouraging participants to provide more definitive responses regarding their drinking motivations.

Results

The present study investigates the mediating role of drinking motives between alcohol use among young adults and Triguna personality.

Reliability Analysis

The internal consistency of Triguna personality subscales was assessed using Cronbach's alpha. The results showed acceptable reliability scores across all three dimensions. The sattva subscale (15 items) demonstrated acceptable reliability ($\alpha = .740$), the Rajas subscale (19 items) showed acceptable reliability ($\alpha = .764$), and tamas subscale (22 items) exhibited high internal consistency ($\alpha = .869$). These values indicate that the Triguna scale used in the present study demonstrated satisfactory reliability for study purposes.

Table 1 presents the reliability coefficients for each Triguna subscale.

Internal Consistency Reliability of Triguna Subscales

Subscale	Number of Items	Cronbach's Alpha
Sattva	15	.740
Rajas	19	.764
Tamas	22	.869

Descriptive statistics

Descriptive statistics were used to calculate the major study variable to examine differences between drinkers and non-drinkers. Total sample consists of 200 individuals, including 111 non-drinkers and 89 drinkers. Drinkers reported lower mean scores on Sattva ($M = 4.68$, $SD = 0.72$) compared to non-drinkers ($M = 5.08$, $SD = 0.80$). In contrast, they showed higher mean scores on Rajas ($M = 83.71$, $SD = 13.44$) and Tamas ($M = 86.57$, $SD = 19.51$) compared to non-drinkers Rajas: ($M = 76.15$, $SD = 15.42$) Tamas: ($M = 70.01$, $SD = 20.61$). Also, drinking motive scores were notably stronger among drinkers

RESEARCH PAPER

($M = 33.83$, $SD = 8.94$) compared to non-drinkers ($M = 17.16$, $SD = 7.20$), highlighting stronger motivation to consume alcohol.

Table 2.
Descriptive Statistics of Study Variables by Drinking Status

Variable	Non-Drinkers (n = 111) M (SD)	Drinkers (n = 89) M (SD)
Sattva	5.08 (.80)	4.68 (.72)
Rajas	76.15 (15.42)	83.71 (13.44)
Tamas	70.01 (20.61)	86.57 (19.51)
Drinking Motives	17.16 (7.20)	33.83 (8.94)

Normality testing

The distribution of study variables was examined using the Kolmogorov-Smirnov and Shapiro-Wilk tests. The results showed that Rajas ($p = .025$), Tamas ($p = .024$), and drinking motives ($p < .001$) deviated from normality. Sattva also showed slight deviation ($p = .049$) but was considered approximately normal given the adequate sample size ($N = 200$). Based on these findings, even with a slight deviation from the normal parametric tests was done because the sample size was sufficiently large.

Correlation Analysis

Note. $N = 200$. ** $p < .0$

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Logistic regression analysis

To examine whether Triguna personality traits predicted alcohol use status, a binary logistic regression analysis was conducted (drinkers vs. non-drinkers). Overall model was statistically significant, $\chi^2(3) = 34.15$, $p < .001$, suggesting that predictors collectively classify between drinkers and non-drinkers. The model explained between 15.7% (Cox & Snell R^2) and 21.0% (Nagelkerke R^2) of the variance in alcohol use status. The Hosmer-Lemeshow test was non-significant ($p = .958$), indicating a good model. The model correctly distinguishes 67% of cases, including 73% of non-drinkers and 59.6% of drinkers. Tamas significantly predicted alcohol use ($B = 0.035$, $p = .003$), indicating that individuals with higher tamasic traits were more likely to be classified as drinkers. Sattva showed a negative association ($B = -0.402$, $p = .074$), although this was not statistically significant. Rajas did not significantly predict alcohol use ($p = .980$).

Pearson correlation analysis was used to examine the relationship between Triguna personality traits and drinking motives. The results showed a significant negative correlation between Sattva and drinking motives ($r = -.33$, $p < .01$), suggesting that individual with higher Sattvic traits tend to show lower motivation to drink.

In contrast, Rajas ($r = .29$, $p < .01$) and Tamas ($r = .45$, $p < .01$) were positively correlated with drinking motives, suggesting that individuals with higher Rajasic and Tamasic traits report stronger motivations for alcohol use. In relation to Sattva and Rajas, Tamas showed the strongest correlation. Inter-correlations among Triguna traits showed that Sattva was negatively correlated with both Rajas ($r = -.28$, $p < .01$) and Tamas ($r = -.41$, $p < .01$), whereas rajas and tamas were positively correlated ($r = .36$, $p < .01$).

Table 3
Pearson Correlations Among Study Variables

Variable	1	2	3	4
1. Sattva	—			
2. Rajas	-.28**	—		
3. Tamas	-.41**	.36**	—	
4. Drinking Motives	-.33**	.29**	.45**	—

The regression coefficients are presented in **Table 4. Binary Logistic Regression Predicting Drinking Status**

Predictor	B	SE	Wald	p	Odds Ratio (Exp(B))
Sattva	-0.402	.225	3.19	.074	0.669
Rajas	0.000	.009	0.00	.980	1.000
Tamas	0.035	.012	8.83	.003	1.036

Mediation Analysis

A mediation analysis was conducted to examine whether drinking motives mediated the relationship between Tamas and alcohol use. The results indicated that Tamas significantly predicted alcohol use ($\beta =$

RESEARCH PAPER

.204, $p < .001$). After, addition of drinking motives in the model, the direct effect of Tamas on alcohol use became non-significant representing full mediation and the bootstrap result indicates that the indirect effect of Tamas on alcohol use is significant (Estimate = 0.043, 95%), as the confidence interval CI [0.024, 0.080] did not include zero.

The indirect effect estimates are presented in **Table 5. Indirect Effect of Tamas on Alcohol Use Through Drinking Motives**

Effect	Estimate	SE	Boot LLCI	Boot ULCI
Indirect Effect	.043	.015	.024	.080

Note. Bootstrap sample size = 5,000

Discussion

The present study investigates the mediating role of drinking motives between alcohol use among young adults and Triguna personality traits. The findings indicate that Tamas is positively associated with alcohol use behavior and drinking motive. In contrast, Sattva is negatively associated with drinking motives and alcohol use behavior, whereas rajas is moderately but weakly associated with the same. The results align with the Motivational Model of Alcohol use proposed by (Cox and Klinger, 1988), and the drinking motives framework developed by (Cooper, 1994), which suggests that individual who consumes alcohol are driven by their subjective psychological outcomes or to regulate emotional states. Behaviors like alcohol use appear to be influenced by both stable personality traits and dynamic cognitive and motivational processes. This helps in understanding how similar environments can influence individuals differently and how this environmental interaction can cause alcohol use behaviors. Alcohol use tendencies do not develop randomly but instead shaped by internal emotional states, learned expectations about alcohol effects, which developed through experience and social learning.

Alcohol expectancies term refers to what a person understands by the aftereffects of alcohol use. It has been observed that individuals consume alcohol for social facilitation which refers to the belief that it makes social situation easy and tension reduction which states that alcohol use can help to reduce stress and tension overtime. Therefore, alcohol expectancies are an important factor to predict the motive for consuming alcohol. However, these models explain drinking behavior, but they don't incorporate culturally based personality systems like Triguna, that influence why people drink. The present study extends further by including Triguna, which describes personality as a

dynamic interplay of three fundamental qualities Rajas, tamas, and sattva (Wolf, 1999). Western models like big five factor theory, views of personality traits are often seen as relatively stable and static whereas Triguna views personality traits as fluid and responsive to situational factors. Triguna model is very helpful in understanding differences in cognition, emotion, and behavior. Therefore, Triguna is relevant in understanding the behaviors like substance use which are influenced by both internal motives and external environment. By keeping this in mind, the study explored the effect of these traits on drinking behavior. The findings conclude that Sattva has a negative association with drinking motives, whereas Rajas and Tamas showed positive associations. Those individuals who possess high dominance levels of Sattva are emotionally balanced and are good at self-regulation, therefore they are less likely to engage in drinking behavior for coping or enhancement. The moderate negative correlation between sattvic traits and drinking motive ($r = -.33$) demonstrates lower levels of motivation to drink. In contrast, Tamas showed the strongest correlations with drinking behavior ($r = .45$), indicating that individuals with higher Tamasic trait dominance are more likely to engage in maladaptive coping, and demonstrates higher motivations to drink. The findings are consistent with the study conducted by (Nedungottil et al., 2022), which indicates Tamas traits are more dominant among individuals with alcohol dependence, followed by rajas which is also positively correlated, ($r = .29$) although its influence appears to weaker in comparison. Therefore, Tamas is the most consistent trait influencing drinking motivations.

It has been observed that Rajas was positively associated with drinking motives, although These findings indicate that even if rajas did not lead to significant alcohol use behavior, but potential sensation-seeking tendencies may elevate drinking-related motivation but do not necessarily translate into actual drinking behaviors. Rajasic traits are associated with ambition, passion, and activity which should instead be used for academics, sports, and social engagement. This supports the idea that alone motives cannot predict drinking behavior; traits such as situational constrains and self-regulation also play a crucial role (Cox & Klinger, 1988).

In contrast, Tamasis is the strongest among all in predicting alcohol use, indicating its role as a key risk factor. Observed results from mediation analysis showed that drinking motives can help in understanding the relationship between personality and behavior. Personality influences behavior but indirectly using motivational processes (Cox &

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Klinger, 1988). However, Tamasic dominant individuals are more likely to develop coping-oriented motives which increase the motivation to drink. Therefore, by combining both Triguna framework and with existing modern constructs including cognitive-motivational models, offering a culturally rooted explanation of alcohol use in the Indian context. These findings align with the already existing study on Western framework of personality which suggests that drinking motives are the strongest predictors for alcohol use and big five personality traits like extraversion is positively associated with enhancement motives, neuroticism is negatively correlated with coping motive, and Conscientiousness has negative relations with most of the drinking motives (Kuntsche et al., 2008). Triguna traits are already exist in our personalities and their imbalance may fluctuate the lifestyle choices we make, these decisions can impact individuals experiences, preferences which can lead to cognitive distortions and ethical dilemmas. Therefore, from a practical lens interventions should focus on reducing maladaptive coping such as binge eating, substance addiction, choices associated with (Tamas) and redirecting (Rajas) energy into productive activities by increasing the sattvic qualities like mindfulness, self-regulation and yoga. Overall, the results suggest that alcohol use is not solely a behavioral outcome, but an integration of culturally and psychologically embedded processes shaped by dynamic interplay of personality and motivational processes.

Conclusion

The present study explains how Triguna personality traits are related to shaping drinking motives and alcohol use among young adults. The results showed sattva as a protective factor as it is associated with emotional regulation and self-control, whereas tamas is associated with avoidance and maladaptive coping increases vulnerability to alcohol use by promoting. Although Rajas is linked to higher motivation to drink, it does not predict alcohol use directly. This means rajas are influenced by other factors such as how individuals regulate their behavior or situation they are in. These results are consistent with the Motivational model of alcohol use proposed by (Cox & Klinger, 1988) and (Cooper, 1994), the study confirms that drinking motives serve as a link between personality traits to alcohol use, but it influences the reasons for individual to drink. Overall, by integrating the Triguna framework with existing psychological theory, the study offers a culturally relevant perspective to understand personality in Indian context. Moreover, the study suggests that prevention can only benefit if

not just focusing on behavior only but its underlying motives and personality patterns.

Limitation and future implications

While the present study aims to understand the relationship between Triguna and drinking motives but there are few limitations that need to be considered while comprehending the results. The use of a non-probability sampling approach such as convenience and snowball sampling may limit the generalizability of the outcome beyond the current sample included. Most participants were university students who may not fully represent diversity of young adult population across varying in socio-cultural and occupational backgrounds. Moreover, the study used self-report measures, which are generally used in psychological research, which increases the likelihood of response biases such as social desirability and recall bias error. Participants are likely to respond in a vague manner by replying in total extremities which can create an error. Participants may not report their accurate drinking patterns and might get influenced by social norms. Also, present study was not able to investigate potential influential external variables such as family dynamics, predispositional factors, or social-cultural background, cultural norms and interaction of these variables to better understand the dynamics between internal personality traits and external factors. with personality and motives in shaping behavior which can lead to alcohol use.

Present study can be improved if future researches consider better experimental designs and by adopting longitudinal to understand relationship between Triguna personality traits, drinking motives, alcohol use behavior with diverse perspectives and with bigger sample size and diverse sample to enhance the generalizability of findings across different populations and cultural contexts. Further, the future researches should investigate the developmental stages of an individual across time which can provide a clearer and detail reasons of how personality evolve into substance use patterns.

References

- Anuradha, M. V., & Kumar, Y. L. N. (2015). Trigunas in organizations: Moving toward an east-west synthesis. *International Journal of Cross-Cultural Management*, 15(2), 195-214.
- Bandhu, D., Mohan, M. M., Nittala, N. A. P., Jadhav, P., Bhadauria, A., & Saxena, K. K. (2024). Theories of motivation: A comprehensive analysis of human behavior drivers. *Acta psychologica*, 244, 104177.
- Cooper, M. L., Russell, M., Skinner, J. B., & Windle, M. (1992). Development and validation of a three-

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- dimensional measure of drinking motives. *Psychological assessment*, 4(2), 123.
- Freichel, R., Pfirrmann, J., Cousijn, J., de Jong, P., Franken, I., Banaschewski, T., ... & IMAGEN Consortium. (2023). Drinking motives, personality traits and life stressors—identifying pathways to harmful alcohol use in adolescence using a panel network approach. *Addiction*, 118(10), 1908-1919.
- Gaur, A. (2024). Analysis of Personality Traits in the Light of Triguna System: A Review. *Indiana Journal of Humanities and Social Sciences*, 5(6), 17-20.
- Goyal, M., & Rathore, S. (2024). Interplay of Rationality and Resilience Via Mediating Triguna Dominance. *International Journal of Indian Psychology*, 12(1), 1516-1526.
- Gupta, A., Pathak, S., & Panwar, N. (2024). Interplay between personality and attitude towards emotions with creative self-concept among young adults. *BMC psychology*, 12(1), 705.
- Ilavarasu, J. V., Mohan, S., & Hankey, A. (2013). Triguna as personality concept: Guidelines for empirical research. *Journal of Applied Consciousness Studies*, 1(1), 15-20.
- Kuntsche, E., Knibbe, R., Gmel, G., & Engels, R. (2006). Who drinks and why? A review of socio-demographic, personality, and contextual issues behind the drinking motives in young people. *Addictive behaviors*, 31(10), 1844-1857.
- Kuntsche, E., von Fischer, M., & Gmel, G. (2008). Personality factors and alcohol use: A mediator analysis of drinking motives. *Personality and Individual Differences*, 45(8), 796-800.
- Lokhande, H., & Panwar, N. (2025). Binge Eating and Mindful Eating: Exploring the Mediating Role of Trigunas of Personality. *International Journal of Indian Psychology*, 13(2).
- Mohan, G. (2018). A Study on Drinking Motives Among College Students in Chennai City-A Cross Sectional Exploratory Survey. *International Journal of Trend in Scientific Research and Development*, 3, 442-456.
- Nadkarni, A., Tu, A., Garg, A., Gupta, D., Gupta, S., Bhatia, U., ... & Velleman, R. (2022). Alcohol use among adolescents in India: a systematic review. *Global Mental Health*, 9, 1-25.
- Parolkar, T. (2022). Gratitude, Happiness & Their Relation with Triguna Personality. *International Journal of Indian Psychology*, 10(3).
- Rathore, B. P. K. (2023). Triguna Theory of Personality. *Indigenising and Decolonising Social Work Education*, 103.
- Rathore, B. P. K. (2023). Triguna Theory of Personality. *Indigenising and Decolonising Social Work Education*, 103.
- Sharma, S., Bhargav, P. H., Singh, P., Bhargav, H., & Varambally, S. (2021). Relationship between Vedic personality traits (Sattva, Rajas, and Tamas) with life satisfaction and perceived stress in healthy university students: A cross-sectional study. *AYU (An international quarterly journal of research in Ayurveda)*, 42(1), 39-44.
- Srivastava, K. (2012). Concept of personality: Indian perspective. *Industrial Psychiatry Journal*, 21(2), 89-93.
- Waddell, J. T., King, S. E., Okey, S. A., & Corbin, W. R. (2024). Event-level risk for negative alcohol consequences in emerging adults: The role of affect, motivation, and context. *Psychology of addictive behaviors*, 38(5), 563.
- Wolf, D. B. (1999). A psychometric analysis of the three gunas. *Psychological reports*, 84(3_suppl), 1379-1390.

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